FIG. 1

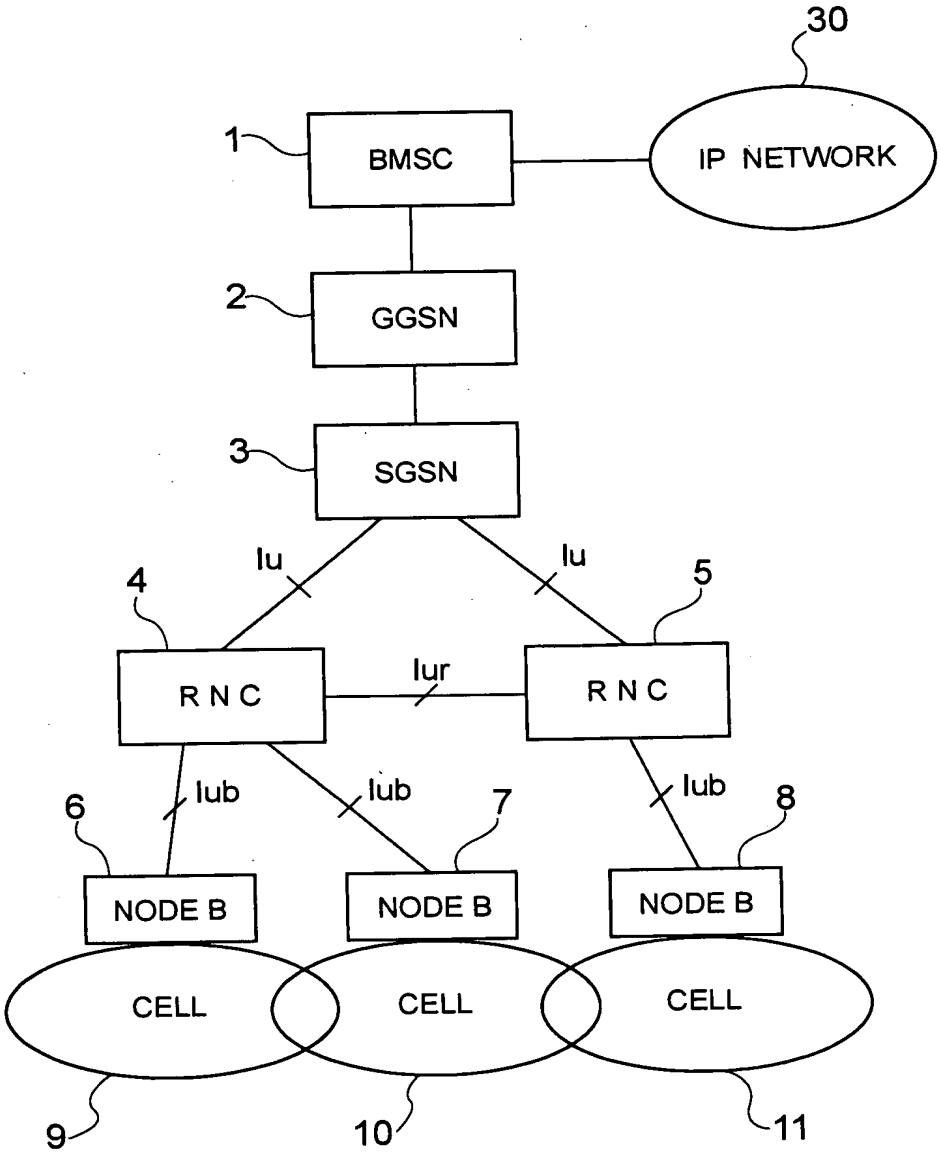

30
1
BMSC
IP NETWORK
2
GGSN
3
SGSN
Iu
Iu
4
5
R N C
Iur
R N C
Iub
Iub
Iub
6
7
8
NODE B
NODE B
NODE B
CELL
CELL
CELL
9
10
11

FIG. 2

RNC FUNCTIONAL BLOCK DIAGRAM

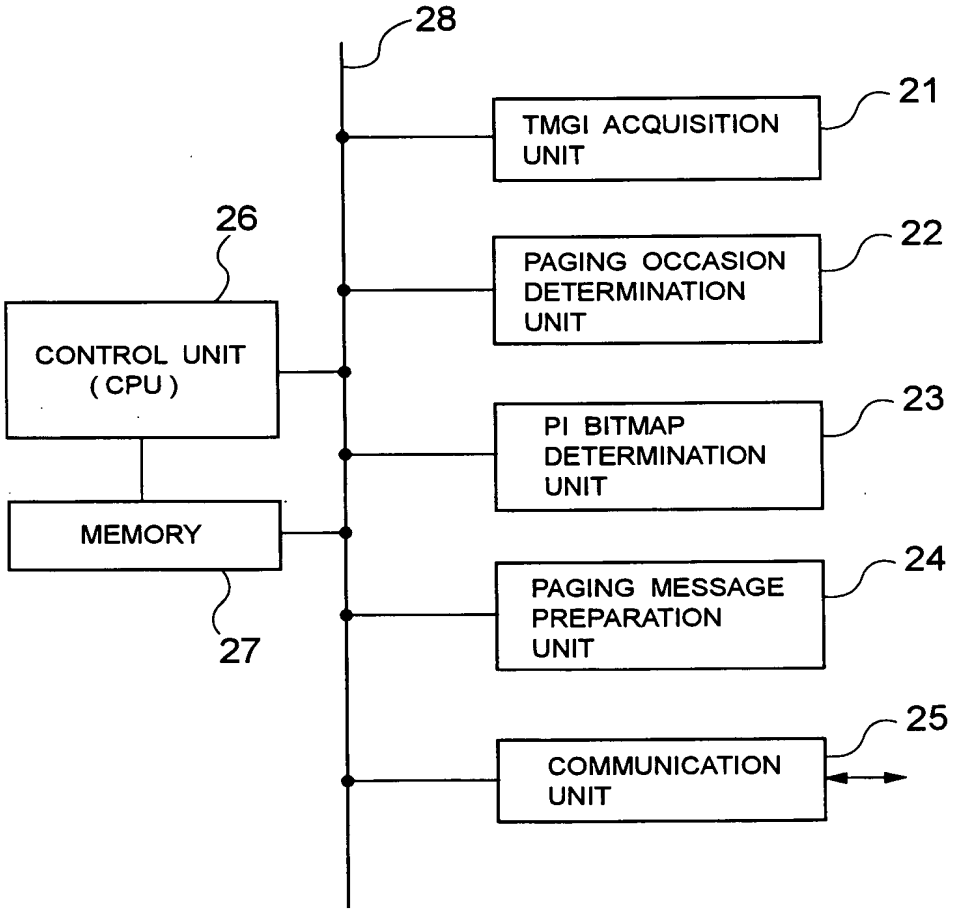


FIG. 3

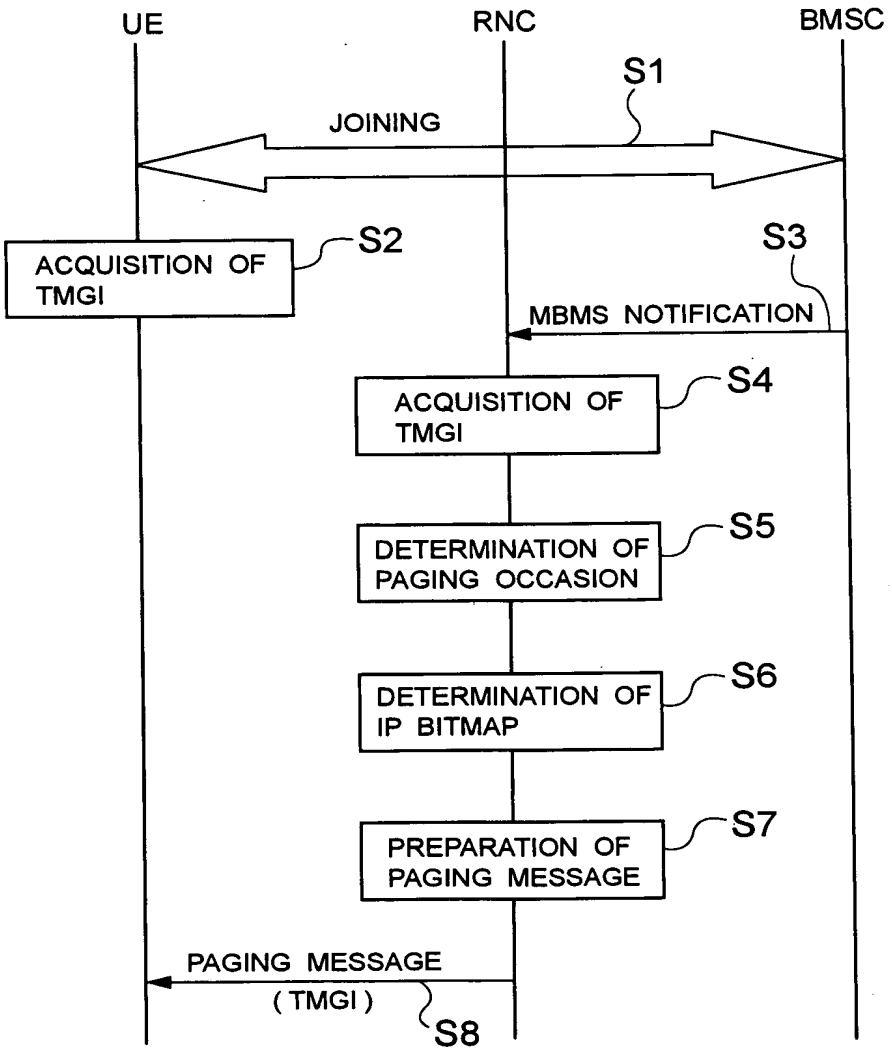

UE
RNC
BMSC
S1
JOINING
S2
ACQUISITION OF TMGI
S3
MBMS NOTIFICATION
S4
ACQUISITION OF TMGI
S5
DETERMINATION OF PAGING OCCASION
S6
DETERMINATION OF IP BITMAP
S7
PREPARATION OF PAGING MESSAGE
PAGING MESSAGE
(TMGI)
S8

FIG. 4

$$PO = [\{(TMGI) \text{ div } (K)\} \bmod \{(\text{DRX CYCLE LENGTH}) \text{ div } (PBP)\}] * PBP + n * (\text{DRX CYCLE LENGTH}) + \text{FRAME OFFSET} \quad \cdots\cdots (3)$$

TMGI : TEMPORARY MOBILE GROUP IDENTIFY (IDENTIFIER PECULIAR TO MBMS SERVICE),

K : NUMBER OF EXISTING PAGING CHANNELS (SCCPCH),

DRX (DISCONTINUOUS RECEPTION) CYCLE LENGTH : PERIOD FOR RECEIVING PICH,

PBP : PAGING BLOCK PERIODICITY,

n : INTEGER INCLUDING ZERO (UP TO MAXIMUM NUMBER OF SFN (SERIAL FRAME NUMBER))

FIG. 5

$$PI = (\text{DRXindex}) \bmod (Np) \quad \cdots\cdots (4)$$

DRXindex : (TMGI) div (8192),

Np : (18, 36, 72, 144),

FIG. 6

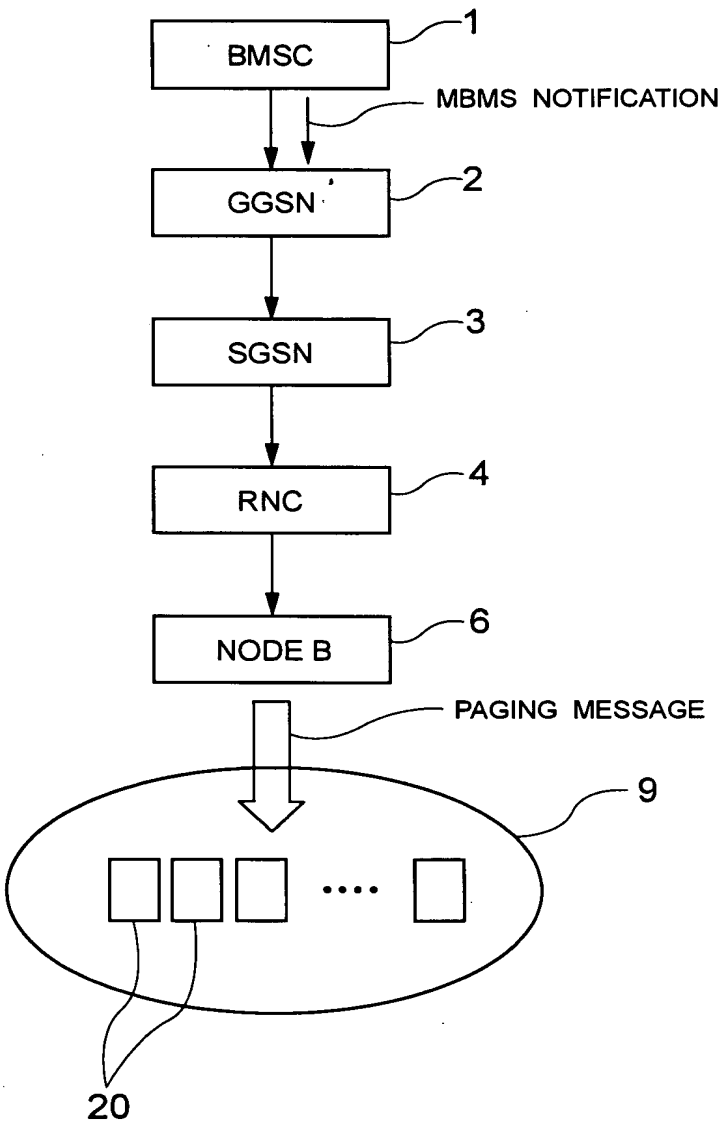

BMSC
1
MBMS NOTIFICATION
GGSN
2
SGSN
3
RNC
4
NODE B
6
PAGING MESSAGE
9
20

FIG. 7

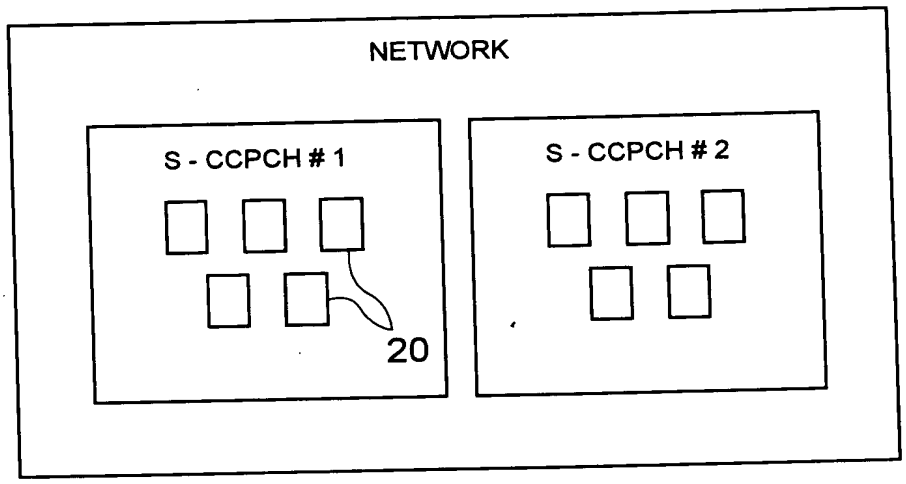

NETWORK
S - CCPCH # 1
S - CCPCH # 2
20

FIG. 8

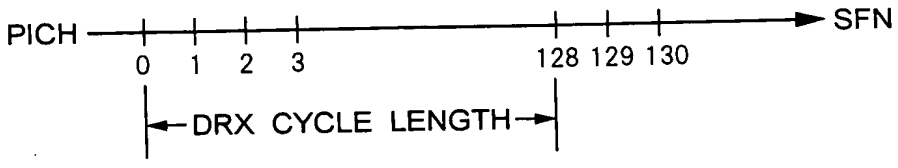

PICH
SFN
0
1
2
3
128
129
130
DRX CYCLE LENGTH

FIG. 9

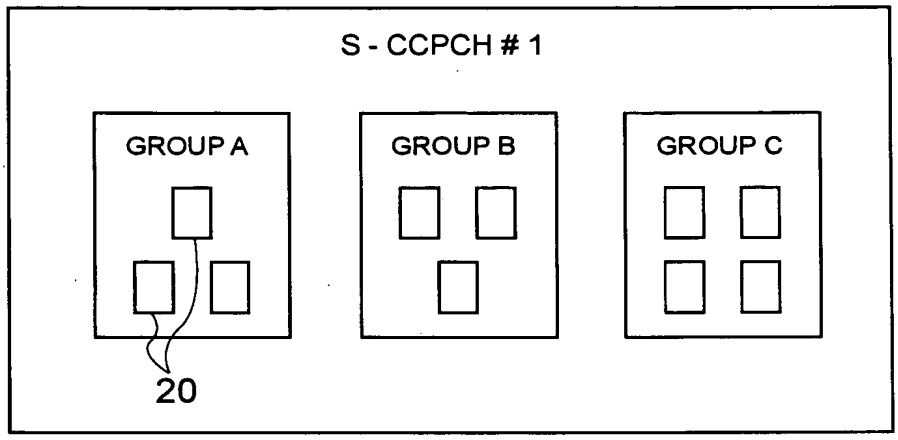


FIG. 10

GROUP	PAGING OCCASION
A	0, 128, 256, ▪ ▪ ▪ ▪
B	1, 129, 257, ▪ ▪ ▪ ▪
C	2, 130, 258, ▪ ▪ ▪ ▪

FIG. 11

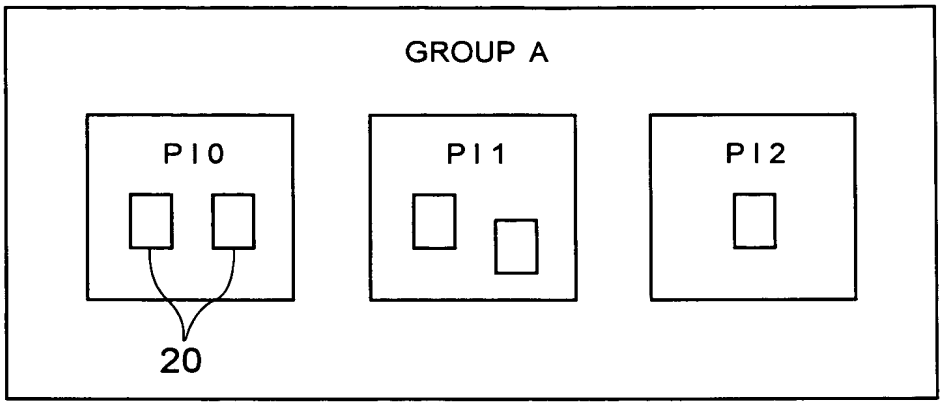


FIG. 12

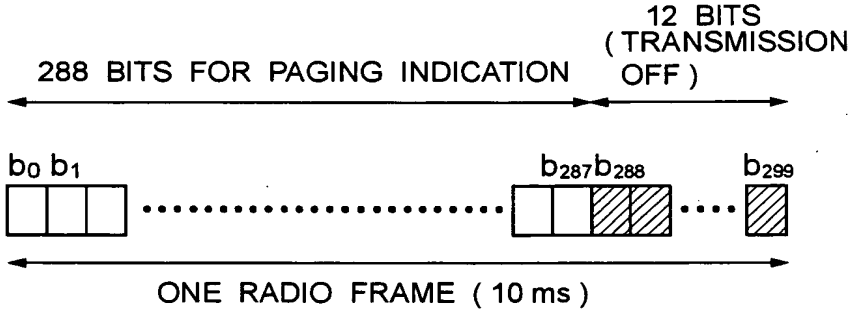


FIG. 13

NUMBER OF CONTINUOUS BITS OF PI FOR EACH Np

NUMBER OF PIS IN ONE FRAME	NUMBER OF BITS FOR ONE PI
18	18
36	8
72	4
144	2

FIG. 14

$$PO = [\{(IMSI)\ div\ (K)\}\ mod\ \{(DRX\ CYCLE\ LENGTH)\ div\ (PBP)\}] * PBP + n * (DRX\ CYCLE\ LENGTH) + FRAME\ OFFSET \quad \cdots\cdots(1)$$

IMSI : INTERNATIONAL MOBILE SUBSCRIBER IDENTIFY (USER IDENTIFIER FIXEDLY ALLOCATED TO USER),

K : NUMBER OF EXISTING PAGING CHANNELS (SCCPCH),

DRX (DISCONTINUOUS RECEPTION) CYCLE LENGTH : PERIOD FOR RECEIVING PICH,

PBP : PAGING BLOCK PERIODICITY,

n : INTEGER INCLUDING ZERO (UP TO MAXIMUM NUMBER OF SFN (SERIAL FRAME NUMBER))

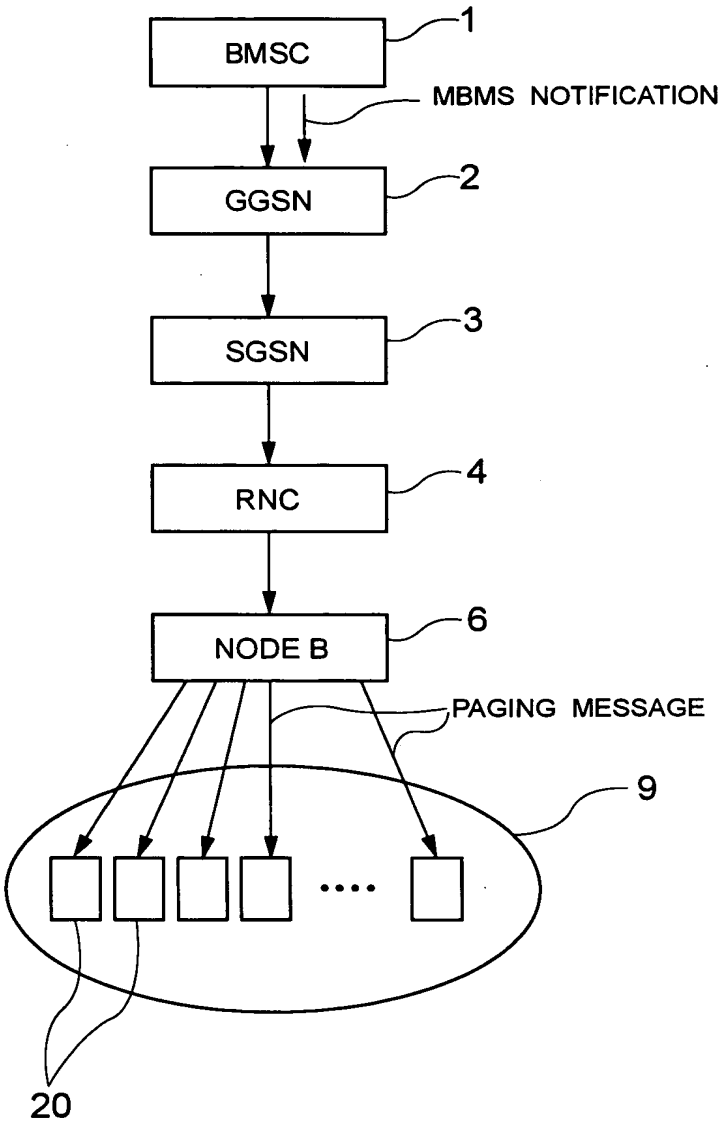
FIG. 15

$$PI = (DRXindex)\ mod\ (Np) \quad \cdots\cdots(2)$$

DRXindex : (IMSI) div (8192),

Np : (18, 36, 72, 144),

FIG. 16


BMSC
1
MBMS NOTIFICATION
GGSN
2
SGSN
3
RNC
4
NODE B
6
PAGING MESSAGE
9
20